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ABSTRACT

The purpose of this journal is to provide useful exchange of information among Navajo teachers. The articles in this issue deal with Navajo linguistics. Kenneth Hale and Paul Platero present an analysis of the relative clause in Navajo. Part 1 analyzes relativization forms and formulates structural descriptions for relativization rules, with reference to pronominalization rules. Part 2 presents arguments supporting the view that relativization and pronominalization are different processes, and that relativization is a raising rule. Mary Helen Creamer discusses the Navajo subject-object inversion, and the rank grouping of nouns is discussed as it relates to sentence structure. The third article, by Libby Jayne Becenti and Delphine Chee, is a discussion of the articulatory characteristics that define the phonological segments of Navajo. (AM)

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DINÉ BIZAAD NÁNÍL'ĮĮH

NAVAJO LANGUAGE REVIEW

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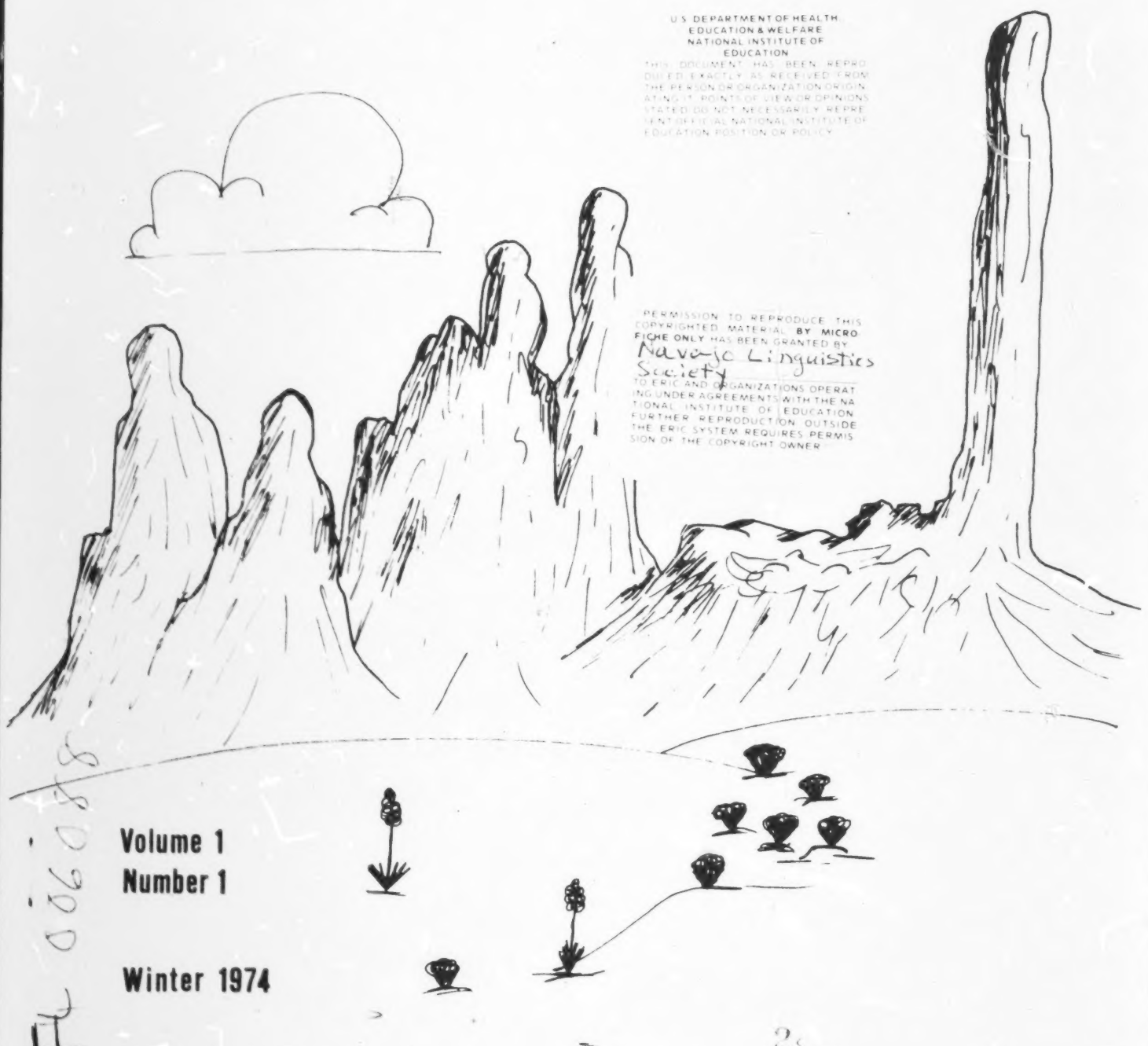

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FOREWORD

This journal, Diné Bizaad Nánílʼįįh/Navajo Language Review, is a realization of a small group of Navajo language teachers and students, known as The Navajo Linguistic Society, who decided in January, 1973, to supplement the Navajo Linguistics Newsletter with longer articles which would give more detailed accounts of the workings of Navajo. It was decided that a journal, carrying useful language-related information for the Navajo teacher, was needed. The journal will make every effort to solicit articles that have direct relevance to classroom teaching as well as first and second language acquisition and bilingual education.

The variety of alphabetic writing systems that have been designed for Navajo has created a potentially confusing situation. Without seeking to impose a judgment as to the relative merits of alternative writing systems, this journal will use a slightly modified version of the orthography recommended at the Conference on Navajo Orthography held by the Center for Applied Linguistics in 1969. The sole departure from the recommendation of that conference is the omission of the redundant bar from /tɬ/ and /tɬʼ/--i.e., these are here written /tl/ and /tlʼ/. Our usage, therefore, differs only minimally from that found in Young and Morgan's classic The Navaho Language.

This journal will use the spelling Navajo rather than Navaho, following an earlier official Navajo Tribal action.

We hope for the participation of Navajo teachers and students hait'éego saad baa ajíízta'ígíí éí doo ííyisíí bíkáhodéest'įįʼda kwii. Jó Diné Bizaad Nánílʼįįh ha'nínígíí bik'ehgo saad ńdaníilʼįįh dooleeɬ.

Appreciation is extended to the Center for Appied Linguistics for its support in the first few issues of Diné Bizaad Nánílʼįįh / Navajo Language Review.

Paul R. Platero
Editor

PREFACE

The Navajo language has been the object of scientific inquiry for many years, engaging the intellectual attention of an impressive number of linguists and anthropologists. It is possibly the most amply documented of the aboriginal languages of North America, and the literature on it can boast a number of works which qualify as classics in American Indian linguistics. These include not only works of primarily theoretical import, such as the collaborative efforts of Edward Sapir and Harry Hoijer, and of Adolph Bitanny and Gladys Reichard, but also the several outstanding volumes, of both theoretical and practical import, resulting from the extraordinarily productive scholarly partnership of William Morgan and Robert Young, as well as the enormous collection of Navajo linguistics and literature set down by Fr. Berard Haile.

One can gain an appreciation of the size of the literature on the Navajo language from the recent, up-to-date, bibliography compiled by Jim Kari for the Navajo Reading Study at the University of New Mexico (Progress Report No. 22, September, 1973). However, as in any field of scholarly inquiry, so in the study of Navajo, the more one learns, the more one comes to appreciate the gaps which exist in one's knowledge. In this instance, the gaps are both theoretical and practical -- and it is not at all clear that the theoretical and the practical can be kept strictly separate. While the Navajo language presents a field of study of enormous interest to linguistic theory, particularly in view of a number of serious challenges it offers to received assumptions about language universals, there are in fact more compelling reasons why it should continue to receive scholarly attention, of even greater intensity than in the past. Many students of Navajo, an increasing number of whom speak it as their first language, are addressing themselves to a question which is central to the concerns of the Navajo educational community.

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The question is this: What role should the Navajo language play in the formal education of Navajo young people? And a closely related question: What role, if any, should Navajo linguistics (i.e., the scientific study of the Navajo language) play in education? These questions cannot really be answered in the abstract. Assuming that there is general agreement that the Navajo language has an important role to play, beyond that of a vehicle of elementary instruction, the exact nature of that role will become clear in the context of the actual development and implementation of programs within a Navajo-controlled educational system. Central to this development is the creation of a corps of Navajo-speaking language scholars, with a foundation both in practice and in theory, who can devote their energies to determining the pedagogical position which the study of their language should assume in the schools. Over the past several years, Navajo educators have, with great courage and perceptiveness, squarely faced the question of the educational role of Navajo language scholarship, and an exciting community of imaginative people -- including teachers, teacher's aides, and college students -- has grown up around this concern. This development is a result, in part, of local control of certain schools and, in part, a result of organizations like the Diné Bi'ólta' Association and the Navajo Reading Study, which devote a significant proportion of their efforts to questions of language.

Recently, a number of these people who are concerned with Navajo language scholarship and pedagogy sought to create a means of keeping in touch, so to speak, by making available to one another the various ideas and materials developed during the course of practice and study. The quarterly publication, Diné Bizaad Nánil'įįh / Navajo Language Review, of which this is the first issue, is one of the means by which this exchange of information will be accomplished. Its purpose is to make available, at relatively modest cost, a wide range of materials dealing with the Navajo language. The articles appearing in the quarterly will not be limited to a single area of Navajo

language scholarship; rather, they will seek to represent all aspects of current work on Navajo, including theoretical studies of Navajo grammar and lexicon, as well as studies of more immediate applicability in language-related educational programs. Nor will the articles be limited to "finished products" of research or pedagogical trial. In fact, an important function of the quarterly will be to initiate dialogue among people concerned in one way or another with the Navajo language. Thus, articles which represent initial suggestions of fruitful lines of research and articles which present initial ideas for the productive use of Navajo-language materials in education will have as important a role to play as will articles which purport to present fully elaborated conclusions. Indeed, at this stage of our scientific understanding of Navajo grammar, for example, few articles could hope to give firm conclusions. Much the same is true in other areas of Navajo language scholarship.

The items which appear in this initial issue of the Review are reasonably representative of one of the areas to be dealt with -- namely, Navajo linguistics. We hope, however, that this selection will not leave the reader with the impression that the quarterly will be devoted exclusively to topics traditionally subsumed under the rubric of "linguistics". Navajo language scholarship is much broader than this, embracing as it does a virtual encyclopedia of cultural, philosophical, and poetical knowledge expressed in the Navajo language. It happens, nevertheless, that topics in the area of Navajo linguistics are receiving a great deal of attention currently, particularly in view of the necessity to define the role of such topics in education. It is inevitable, therefore, that linguistic articles will appear with considerable frequency in the quarterly.

The article by Paul Platero and myself, "Aspects of Navajo Anaphora", represents an initial attempt to develop a theory of the Navajo relative clause along lines somewhat different from

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the theory suggested in Paul Platero's A Study of the Navajo Relative Clause (M.I.T. master's thesis, 1973). It is a theoretical article, but the details of the new analysis are not fully worked out. We merely present evidence in support of what might be called the "raising hypothesis" for the derivation of relative clauses, as apposed to the earlier "deletion hypothesis". We hope that the paper will be read with a severely critical eye, both in regard to the Navajo data we use and in regard to the analysis we propose to account for those data; only through a critical approach will an adequate account of the Navajo relative clause eventually emerge. The importance of the Navajo relative clause is considerable -- it offers perhaps the best example of the structural differences between Navajo and English. A full understanding of it could form the basis of an interesting unit of study for Navajo-speaking students. Even at this stage of investigation, the properties of the Navajo relative clause could form the basis of an exciting exchange of ideas among students of Navajo grammar.

The subject of Mary Helen Creamer's article, "Ranking in Navajo Nouns", is remarkably well suited to the purpose of eliciting dialogue among Navajo-speaking language scholars. It has been assumed for some time that there exists in Navajo a rule of "subject-object inversion" which effects an interchange of subject and object noun phrases. Specifically, the rule converts sentences of the form SUBJECT OBJECT yi-VERB into sentences of the form OBJECT SUBJECT bi-VERB; for example, it converts the sentence /ɣɬɬ' dzaanéézˊ yiztaɣ/ into the sentence /dzaanéézˊ ɣɬɬ' biztaɣ/. The syntactic effect of this rule is, therefore, similar to that of the "passive rule" in English, which, for example, converts the active sentence The horse kicked the mule into the corresponding passive sentence The mule was kicked by the horse. But in Navajo, as contrasted with English, the application of the rule is governed by a hierarchy of nominal concepts -- with human nouns ranking highest and inanimate or abstract nouns ranking lowest. The rule applies

freely when the subject and object are equal in rank; but in cases of inequality, the rule applies or does not apply in such a way as to ensure that the higher-ranking noun appears in "topic" (i.e., initial) position. Creamer's paper presents the details of this nominal hierarchy for her own Navajo usage. Not only does this paper provide the material for an exciting discussion among Navajo speakers, it also provides the material for a unit of Navajo language study in the classroom. One of the goals in any scientific study is the discovery of generalizations which are to be found in the data which form the subject matter of the particular science. Linguistic intuitions are the data of the science of linguistics and can, therefore, constitute an important vehicle for teaching the methods of scientific inquiry. In fact, this is one of the most important roles which the study of Navajo grammar can play in education. The topic of this paper lends itself naturally to this purpose by providing students with an opportunity to make a detailed linguistic observation and to state a general rule on the basis of data to which they have immediate access as speakers of Navajo. This can be done quite simply by presenting Navajo-speaking students with the sentences, both grammatical and ungrammatical, which appear in Creamer's paper and setting them the problem of discovering and articulating the principle involved in the application or non-application of subject-object inversion. It is hoped that this article will not only stimulate discussion but also elicite other articles of a similar nature which can serve as a basis for engaging students in the discovery and formulation of linguistic generalizations.

Perhaps the most important development in Navajo linguistics is the increasing use of Navajo itself in the writing of technical and semi-technical material. This is in complete harmony with the Navajo conception of bilingual education, according to which Navajo is viewed as an essential instrument of intellectual growth and expression. The article, Diné Bizaad Dadiits'a'ígíí Naaskáá' (A Study of Navajo Sounds), by Libby Jayne Becenti and Delphine Chee, being written in Navajo,

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represents what is hoped will be a frequent feature in this quarterly. It is a discussion of the articulatory characteristics which define the phonological segments of Navajo. Its importance lies not only in the phonological detail which it describes but also in the example it sets for the development of a technical linguistic terminology in Navajo. Navajo words, particularly verb-words and nominals derived from them, are typically polysyllabic, being constructed of individual morphemes which contribute to the meaning of the whole. This enables the language to coin an indefinite number of technical terms. The most obvious methods of coinage -- reduced relative clauses -- yield words which are often too long to serve in an efficient technical terminology. However, the language also makes use of the method of compounding, as exemplified in such terms as /tsésǫ'/ (literally stone-star) for "glass, mica", and /łáʃish/ (literally hand-pouch) for "glove", yielding manageable words of at most two syllables. This article demonstrates the productivity of compounding in the creation of a technical vocabulary by presenting and defining a readily understandible and virtually complete articulatory nomenclature for Navajo. The principles embodied in this nomenclature extend readily to all areas of linguistics and, more generally, to all areas of modern science. It seems especially appropriate that this article should appear in the first issue of Diné Bizaad Náníl'įįh, since an important function of the quarterly could be the suggestion, by Navajo-speaking scholars in various fields of endeavor, of technical terminologies for all areas dealt with in modern education. There are a number of ways in which the Becenti-Chee article can be put to immediate use in the classroom. Besides its obvious relevance in teaching aspects of phoentics, it can also serve as a model for the use of compounding in the creation of a technical vocabulary --Navajo-speaking students can themselves be involved in the creation of technical terms. The article could be organized into a unit of study by introducing one or two readily understandable phonological features -- e.g., the bilabial and apico-alveolar posi-

tions of articulation -- together with the terms which have been suggested to designate them. When additional articulatory features are explained, the students could be encouraged to invent names for them. In this way, the school as a whole could participate in the process of vocabulary development, thereby virtually guaranteeing the acceptance and efficiency of new technical terms.

In conclusion I wish to express my admiration for the Navajo educators and scholars who have worked with great vision toward the goal of ensuring that the enormous intellectual wealth of the Navajo people assume its deserved place in Navajo education. It is largely due to their efforts that the opportunity exists for an increasing number of Navajo-speakers to become involved in the study of their language. The benefits of this circumstance are extremely far-reaching, not only to the Navajo community itself, but to the country as a whole.

Ken Hale
M.I.T.

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ASPECTS OF NAVAJO ANAPHORA: RELATIVIZATION AND PRONOMINALIZATION

KENNETH HALE AND PAUL R. PLATERO

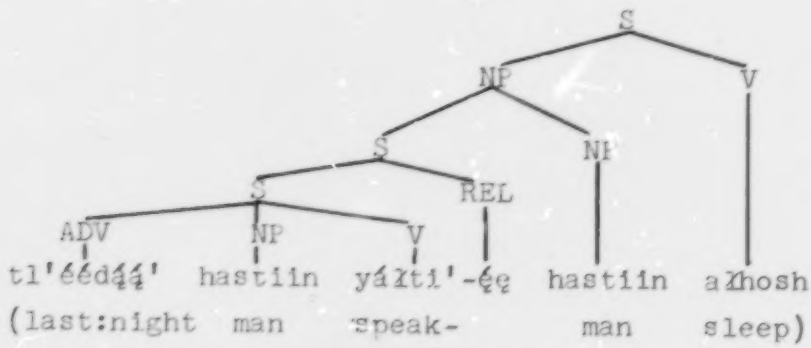
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

In Navajo, relative clauses appear in two forms. One of these is common in verb-final languages the world over--namely, the type in which the head noun phrase follows the relative clause and in which the relativized noun phrase (i.e., the shared noun phrase in the subordinate clause) is apparently simply deleted. Consider, for example, the sentence (1):

(1) Tl'éédą́ą́' yáłti'-ę́ hastiin ałhosh.
(last:night speak-REL man sleep)
'The man who spoke last night is sleeping.'

In his study of the Navajo relative clause, Platero (1973) proposed that sentences like (1) are derived from underlying structures of the form represented by (2) below:

(2)



by deletion of a noun phrase in the subordinate, or relative, clause under identity with the head noun phrase. This deletion,

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This work was supported in part by grant #5 T01 HD-00111 of the NIH. This paper is a slightly expanded version of the one read at the XII Conference on American Indian Languages, held in conjunction with the annual meetings of the American Anthropological Association in New Orleans in 1973.

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he proposed, is accomplished by means of a rule of roughly the form given in (3) below:

(3)

X	$[_{NP}[_{S}$	Y	NP	Z$]_{S}$	NP$]_{NP}$	W	
1		2	3	4	5	6	⇒
1		2	0	4	5	6	

Condition: 3 = 5

He justified the variables in this rule by demonstrating, in more complex sentences, that there is no principled upper limit to the distance which can separate terms 3 and 5 in the structural description of this rule.

However, there is another form which relative clauses can take in Navajo. In fact, this second alternative is preferred over that represented by sentence (1) -- in this alternative, there is no head noun phrase in the surface structure. The noun phrase which functions as the logical head of the relative clause is to be found in the position corresponding to its logical function in the <u>subordinate</u> clause rather than in the <u>main</u> clause. Thus, the alternative to (1) is (4):

(4) Tl'éédą́ą́' hastiin yáłti'-ę́ę a łhosh.
(last:night. man speak-REL sleep)

Platero suggests that this sentence is also derived from the deep structure (2), but by deletion of the <u>head</u> noun phrase rather than by deletion of the lower noun phrase. This deletion is accomplished by a rule of the following form:

(5)

X	$[_{NP}[_{S}$	Y	NP	Z$]_{S}$	NP$]_{NP}$	W	
1		2	3	4	5	6	⇒
1		2	3	4	0	6	

Condition: 3 = 5

Note that the structural description of this rule is identical to that of (3), only the structural change is different --rule (3) effects a backward deletion, while rule (5) effects a forward deletion. This state of affairs is remeniscent of another deletion rule in Navajo--namely the deletion rule

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which applies generally to co-referential noun phrases and whose effect is like that of pronominalization in other languages of the world--we will refer to this rule hereinafter as 'pronominalization'. Thus, for example, the sentences

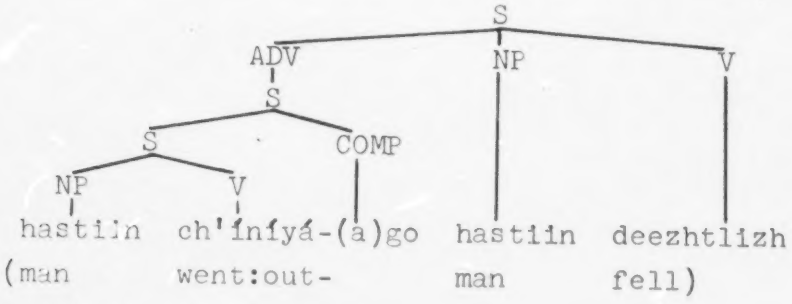
(6) Hastiin ch'íníyá-(a)go deezhtlizh.
(man went:out-COMP fell)
'When the man went out, he tripped.'

and

(7) Ch'íníyá-(a)go hastiin deezhtlizh.
(went:out-COMP man fell)
'When he went out, the man tripped.'

are derived, by forward and backward deletion, respectively, from a common underlying structure of roughly the following form:

(8)



This circumstance led Platero to suggest that the same deletion principle is operative in both relativization and pronominalization; he therefore proposed that a single structural description will serve for both rules. This is enhanced by the observation that the condition on backward deletion--i.e., only possible if the deletee is in a subordinate clause--corresponds to the fact that backward deletion in relative clauses is, by definition, always into a subordinate clause. Thus, it is possible to write a single, more general, expression of the deletion operation, as in (9):

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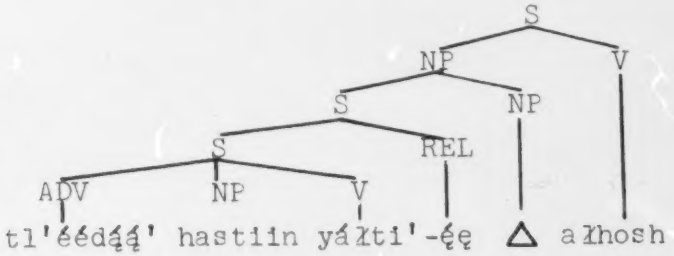
(9)

	X	NP	Y	NP	Z	
	1	2	3	4	5	⇒
(a)	1	2	3	0	5	
(b)	1	0	3	4	5	

Condition: (i) 2 = 4
(ii) (b) only if 2 is in a subordinate clause

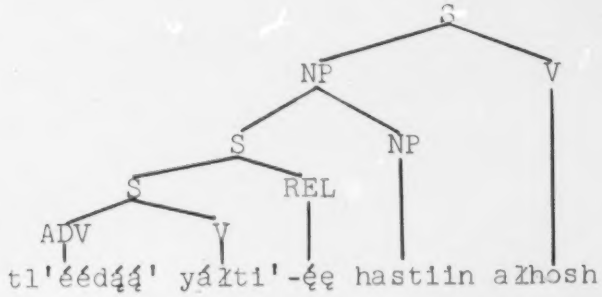
On the basis of the fact that the conditions on pronominalization appear to correspond so perfectly to the facts of relativization, Plater considered only briefly an alternative conception of Navajo relativization according to which sentences like (1) are derived by raising the lower noun phrase into head position. This alternative would convert structures of the form

(10)



into structures of the form

(11)



by means of an optional raising rule. Such a raising rule might be explicitly expressed as in (12):

(12)

	X	$[_{NP}[_{S}$	Y	NP	Z$]_{S}$	$]_{NP}$	W	
	1		2	3	4	5	6	⇒
	1		2	0	4	5	6	

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Being optional, this rule would account both for sentences like (1)--in which the rule would not have applied--and for sentences like (4)--in which the rule would have applied.

However, if relativization is achieved by means of a rule like (12), then its similarity to pronominalization cannot be expressed directly in the grammar of Navajo--that is to say, it would not be possible to use rule (9) to cover both phenomena.

Chomsky (personal communication) has suggested that it would, on the other hand, be a mistake to regard the two phenomena as the same. Platero's own work is devoted to showing that relativization conforms to Ross' island constraints (Ross 1967), while pronominalization does not--i.e., in relativization there are conditions on the variable Y of (9) which do not obtain in the case of pronominalization. Moreover, if relativization is in fact by deletion, then there is another property which distinguishes it from pronominalization. In deriving a surface structure from (2), deletion must apply, while deletion in other structures, though preferred, is in fact optional. Thus sentences like (13), in which deletion has not applied are acceptable:

(13) Łéétchąą'í dibé yiyiisxį́ biniinaa shizhé'é
Łéétchąą'í yił adeesdǫǫh.
'Because the dog killed a sheep, my father killed the dog.'

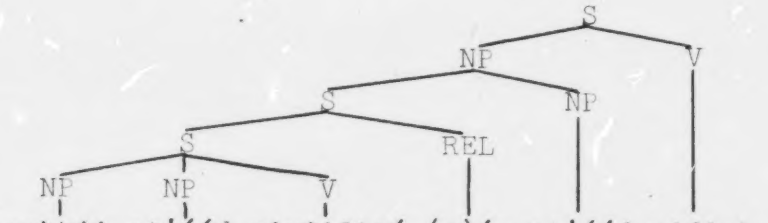
These facts are consistent with the hypothesis that relativization and pronominalization are separate processes, and the fact about relative surface structures would follow naturally if relativization were by raising rather than by deletion.

The remainder of this paper will be devoted to further considerations which tend to support the view that relativization is different from pronominalization and, possibly, that the former should in fact be a raising rule.

One conceivable line of argument in defense of the original position--i.e., that relativization and pronominalization are the same-- would take the following form: If there are

additional constraints on deletion which are identical for both relativization and pronominalization, then that would support the claim that the two phenomena are in reality the same and, therefore, to be handled by means of the same mechanism in the grammar. In this connection, consider the following fact. If backward deletion applied in the relative clause structure (14), the resulting surface structure (15) would be one whose only interpretation would be at variance with that embodied in the deep structure itself:

(14)

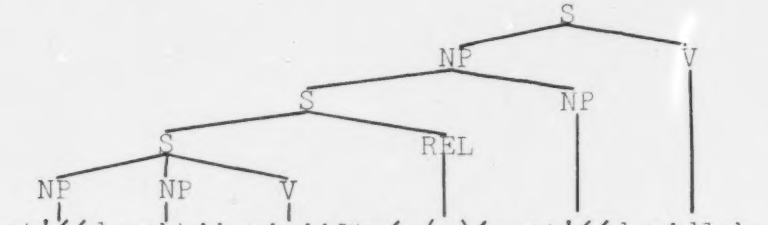


ashkii at'ééd yiyiiłtsą́-(n)ęę at'ééd yidloh
(boy girl saw- girl laugh)
'The girl that the boy saw is laughing.'

(15) Ashkii yiyiiłtsą́-(n)ęę at'ééd yidloh.
(boy saw-REL girl laugh)
'The girl that saw the boy is laughing.'

Thus, the surface structure is interpreted as if it had come from (16) instead of (14):

(16)



at'ééd ashkii yiyiiłtsą́-(n)ęę at'ééd yidloh
(girl boy saw- girl laugh)

If, on the other hand, forward deletion had applied, the resulting surface structure (17) would be ambiguous (a tolerable ambiguity which is sometimes avoided by the use of the so-called 'fourth person'), but it would have at least one reading consistent with the deep structure (14):

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(17) Ashkii at'ééd yiyiiłtsą́-(n)ęę yidloh.
(boy girl saw-REL laugh)
(a) 'The girl that the boy saw is laughing.'
(b) 'The boy that saw the girl is laughing.'

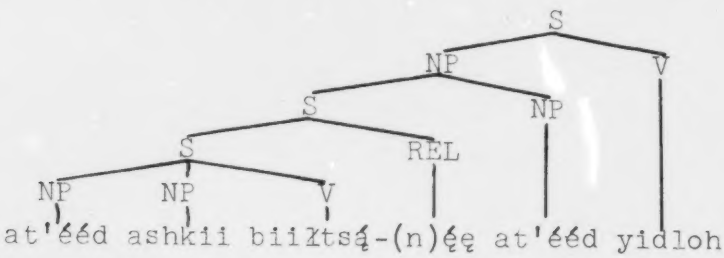
Now suppose we attempt to account for this fact by placing a constraint on backward deletion which would prevent its applying in (14) but allow it in (16). Such a constraint might be stated as in (18):

(18) In a sentence of the form NP_1 NP_2 V, only NP_1 can be deleted.

This would ensure that the surface structure (15) could derive only from (16), not from (14).

Notice that if the embedded transitive clause in (14) undergoes passive-like subject-object inversion transformation (cf., Hale 1973), giving the intermediate structure (19):

(19)

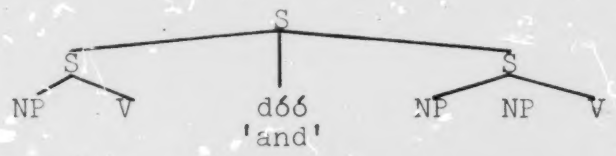


the constraint (18) will allow the initial instance of the noun phrase /at'ééd/ 'girl' to delete, thereby giving sentence (20), whose interpretation is consistent with (19) (and with (14), its source):

(20) Ashkii biiłtsą́-(n)ęe at'ééd yidloh.
'The girl that was seen by the boy is laughing.'

Now observe that a similar constraint must be imposed on deletion of the type referred to here as pronominalization. The constraint pertains not only to backward pronominalization, but to forward pronominalization as well. Thus, for example, in in a conjoined structure like (21), only the first noun phrase in the second conjunct may delete:

(21)



Therefore, the sentence

(22) At'ééd ch'íníyá dóó ashkii yiyiiłtsą́.
(girl went:out and boy saw)

has the meaning

(23) The girl went out and saw the boy.

as is consistent with the source

(24) At'ééd ch'íníyá dóó at'ééd ashkii yiyiiłtsą́.
(girl went:out and girl boy saw)

It cannot have the meaning

(25) The girl went out and the boy saw her.

This is predicted by the constraint (18), which guarantees that (22) will not come from

(26) At'ééd ch'íníyá dóó ashkii at'ééd yiyiiłtsą́.
(girl went:out and boy girl saw)

If the second clause of (26) is inverted, or 'passivized', however, deletion can apply to give

(27) At'ééd ch'íníyá dóó ashkii biiłtsą́.
'The girl went out and was seen by the boy.'

It would appear, therefore, that both pronominalization and and relativization are subject to the constraint (18). This, in turn, might be taken as evidence that they should be regarded as the same thing. However, this reasoning is fallacious. In considering a wide range of sentences in which a constraint like (18) is operative, it becomes readily obvious that it is not really a condition on rules but rather a condition on the interpretation of Navajo sentences with, so to speak, missing noun phrases which is at issue. Moreover, it is evident that there is a general principle of interpretation for transitive

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sentences in which the subject and object are third person. The principle can be expressed roughly as in (28):

(28) (a) In sentences of the form (NP) NP yi-V, the NP immediately preceding the verb is the logical object.

(b) In sentences of the form (NP) NP bi-V, the NP immediately preceding the verb is the logical subject.

This principle exists independently of deletion and ensures the correct interpretation of such sentences as those in (29):

(29) (a) ɬįį' dzaanéézˊ yi-ztaɬ.
(horse mule yi-kicked)
'The horse kicked the mule.'

(b) Dzaanéézˊ ɬįį' bi-ztaɬ.
(mule horse bi-kicked)
'The mule was kicked by the horse.'

This principle extends naturally to the deletion cases and ensures the correct interpretation of transitive clauses from which one or another noun phrase has been deleted. If this is, in fact, a general principle, then we cannot claim that it is a specific property of deletion rules. It is, instead, a principle which will be envoked to interpret sentences from which some noun phrase has been deleted regardless of the way in which the noun phrase was removed. It is, therefore, independent of the question as to whether relativization is by raising or deletion.

There are other cases in which a principle of interpretation interacts with the removal of a noun phrase. Consider, for example, the following underlying structure, which would exist under the deletion hypothesis for relativization:

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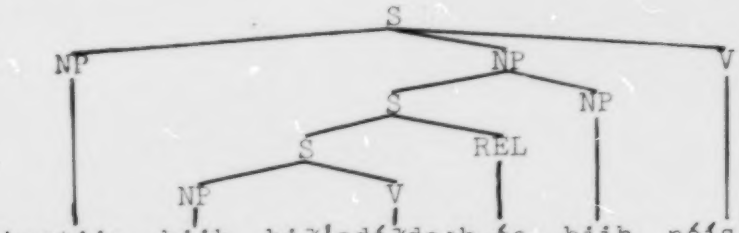
(30)



'The man butchered the deer I shot.'

If forward deletion applies to this structure, it will delete the head noun phrase /bɬɬh/ 'deer', thereby deriving sentence (31):

(31) Hastiin bɬɬh biɮ'adéɮdǫǫh-ɬǫ néís'ah.
(man deer I:shot-REL butchered)
'The man butchered the deer I shot.'

whose interpretation is in accordance with the underlying structure. However, if backward deletion had applied, the derived string would be (32):

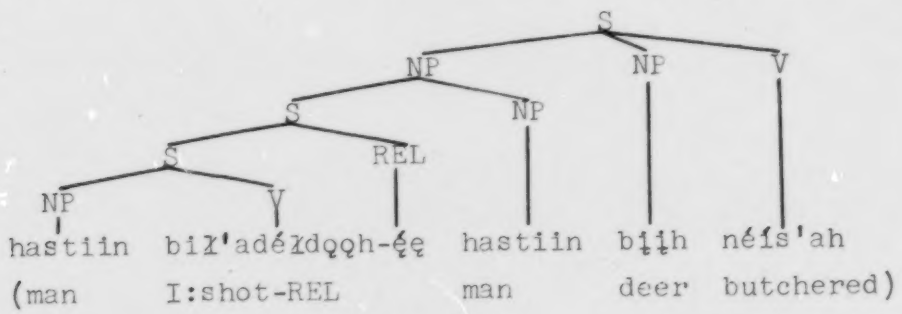
(32) Hastiin biɮ'adéɮdǫǫh-ɬǫ bɬɬh néís'ah.
(man I:shot-REL deer butchered)

The only interpretation which this string can receive is

(33) The man I shot butchered the deer.

This is clearly at variance with the meaning embodied in the underlying structure (30). Instead, the appropriate underlying structure for (32) would, under the deletion hypothesis, be (34):

(34)



In other words, in the string (32), the noun phrase /hastiin/ 'man' is taken to be the object of the verb /biɮ'adéɮdǫǫh/ 'I

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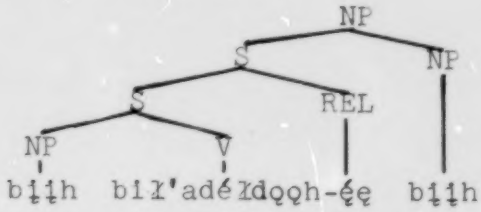
shot him/it' as well as the subject of the higher verb /néís'ah/ 'he butchered it'. Now, there is, under the deletion hypothesis, no principled reason why one cannot apply backward deletion in substructures like (35):

(35)



for that is precisely what happens in the derivation of (36):

(36) Biɮ'adéɮdǫǫh-ęę bɨɬh níséɮ'ah.
(I:shot-REL deer I:butchered)
'I butchered the deer I shot.'

Why, then, is backward deletion inappropriate in the case of structures like (30)? One might attempt to impose some such constraint as (37) on deletion:

(37) In sequences of the form
$X \quad NP_1 \quad [_S NP_2 \; Y]_S \quad Z$
NP_2 may not be deleted.

This would prevent backward deletion in (30), while allowing it in the case of structures like that which underlies (36). However, if this is indeed a constraint on the deletion rule, then it must be prevented from applying in the case of the forward pronominalization involved in sentence (38):

(38) Ashkii tl'iish bishxash-ęę yiɮ adeesdǫǫh.
(boy snake bit-REL shot)
'The boy shot the snake he was bitten by.'

This sentence comes from the underlying structure (39):

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(39)

ashkii ashkii tl'iish bishxash-ęę tl'iish yiɬ'adeesdǫǫh
(boy boy snake bit- snake shot)

Clearly, (38) is derived from (39) in part by allowing the first instance of the noun phrase /ashkii/ 'boy' to delete the second--but this latter is precisely the noun phrase which could not be deleted according to the constraint (37). Constraint (37) must, then, have a condition on it to the effect that NP_1 and NP_2 may not be coreferential--that is to say, if NP_1 triggers the deletion of NP_2, then the deletion is allowed.

And there is some question as to whether constraint (37) ever works in the case of forward pronominalization. Consider, for example, structure (40) below:

(40)

at'éédd hadoolghaazh-go ashkii at'éédd bishxash-ęę yiztaɬ
(girl cry:out-COMP boy girl dog bit-REL dog kicked)
'When the girl cried out, the boy kicked the dog that bit her.'

For some speakers, the string resulting by forward deletion--i.e., (41) below--allows an interpretation in accordance with the underlying structure, while for other speakers it does not.

(41) At'éédd hadoolghaazh-go ashkii ɮéédchąą'ɪ bishxash-ęę yiztaɬ.

That is to say, for some speakers, (41) can mean

(42) When the girl yelled out, the boy kicked the dog that bit her.

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In fact, for these speakers, (42) is the preferred interpretation because it corresponds to the most likely juxtaposition of events. But for other speakers, the only interpretation is

(43) When the girl yelled out, the boy kicked the dog that bit him.

For these latter speakers, a constraint like the ammended version of (37) could be invoked to account for their interpretations of sentences.

It should be clear, however, that imposing a constraint on the deletion rule itself will not be a simple or straightforward matter. Not is it at all obvious that a unified constraint could be formulated to apply both to relativization and to pronominalization. Moreover, the attempt to account for the behavior of sentences like (32) by constrainting the rules which derive surface structures from their underlying sources obscures the true nature of the problem. The point is this: when backward deletion applied in the underlying structure (30), it yielded a string of noun phrases and verbs so strongly open to a particular interpretation as to obliterate the one embodied in the structure itself. Specifically, in this instance, the tendency to associate the noun phrase /hastiin/ 'man' with the verb /bił'adéłdǫǫh/ 'I shot him'--i.e., the tendency to interpret the two words as clausemates in defiance of the underlying structure--is so strong that it precludes any other interpretation. The problem, therefore, resides in the surface structure, not in the transformational rules. Evidently, in addition to interpretive principles of the type represented by (28), there are also interpretive strategies for parsing the surface representations of complex sentences. The facts surrounding sentence (32), and the class of complex structures which it represents, suggest that an elementary parsing principle like (44) is employed, with varying degrees of strictness, by speakers of Navajo:

(44) In a string Σ of the form (NP) NP V, the subsequence (NP) NP is a clausemate with V if the string Σ exists as a well-formed simple sentence of Navajo.

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If this principle were applied to (32), it would allow only the interpretation (33), since the NP V string

(45) Hastiin bił'adéłdǫǫh.
(man I:shot)
'I shot the man.'

exists as a well-formed simple sentence of Navajo. Similarly, the sentence

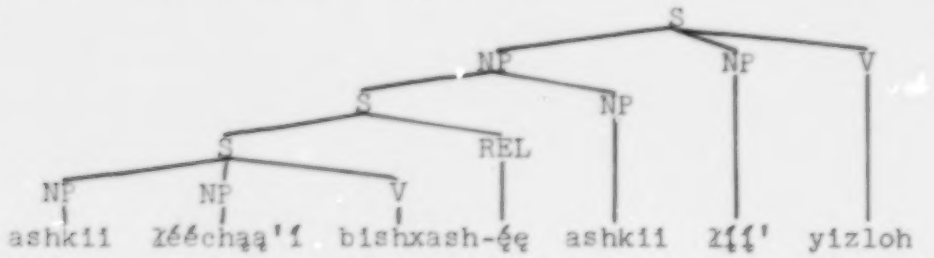
(46) Ashkii łééchąą'í bishxash-ǫǫ łį́į' yizloh.
(boy dog bit-REL horse roped)

allows only interpretations according to which the noun phrases /ashkii/ 'boy' and /łéechąą'í/ 'dog' are clause mates with the verb /bishxash/ 'he was bitten by it', since the sentence (47) is a well-formed simple sentence of Navajo:

(47) Ashkii łééchąą'í bishxash.
'The boy was bitten by the dog.'

In other words, sentence (46) allows an interpretation corresponding to the underlying structure (48):

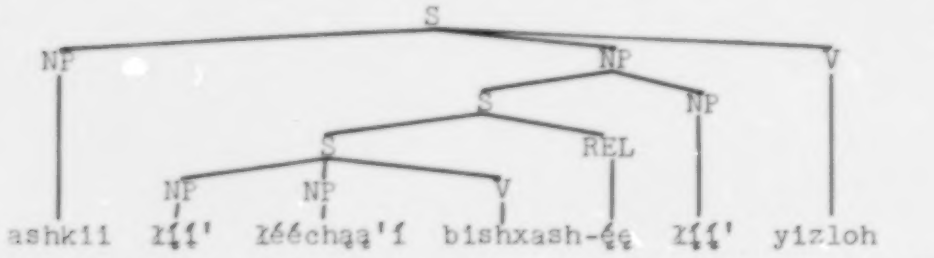
(48)



'The boy that was bitten by the dog roped the horse.'

It does not allow and interpretation corresponding to the underlying structure (49):

(49)



'The boy roped the horse that was bitten by the dog.'

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It should be born in mind, however, that the parsing principle formulated as (44) is not absolute--it can be relaxed by some speakers, provided the context is sufficiently strong to bring out a competing interpretation of a structurally ambiguous string (as is the case in sentence (41)).

We have seen in the foregoing that there are circumstances under which the deletion of a noun phrase creates a surface structure which is capable only of interpretations which are in direct conflict with the meaning embodied in the deep structure. We have intimated also that any attempt to account for this fact by placing constraints on deletion rules merely dodges, and in fact obfuscates, the true nature of the problem, which has to do with the interpretation of surface structures, not with the application of the productive rules of the grammar. It is appropriate at this point to suggest an explicit conception of the functioning of rules and interpretive principles within the description of Navajo. Suppose we make the assumptions in (50):

(50) (i) The syntactic rules of Navajo--specifically those which by one means or another effect the removal of a noun phrase constituent from a particular position in underlying structure--apply without constraint.

(ii) There exists certain principles of semantic interpretation--like (28) and (44)--which apply at the surface structure level of syntactic representation to interpret grammatical relations.

(iii) A syntactic derivation is identified as ill-formed if the surface structure interpretation principles assign it a semantic reading which is at variance with the meaning assigned by the deep structure.

If this is the correct solution to the particular problems of Navajo grammar discussed here, then it is clear that the data examined in this connection can in no way be used to support the view that relativization and pronominalization constitute a unified process. This follows, since the principles of surface interpretation--whose existence can hardly be denied, irrespective of the particular grammatical theory adopted--do

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not care how a particular surface string is derived. That is to say, their application is totally independent of whether a particular syntactic position is vacated by means of a deletion rule or by means of a movement rule. We are free, therefore, to reconsider the possibility that relativization in Navajo involves a raising rule like (12). However, aside from Chomsky's observations mentioned earlier, our evidence for a raising rule has only been negative. That is, we do not have any convincing evidence against the raising hypothesis. We would like, at this point, to consider some positive evidence in its favor.

In an important paper on Navajo syntax, Kaufman (1973) describes an unbounded rightward movement rule whose structural description is, in its essential details, identical to (12) This is the rule which is involved in deriving such sentences as (51):

(51) Shizhé'é chidí niiníɁbą́z-í-jį'-dęę́' hooɁtį́įɁ.
(my:father car drove:upto-COMP-upto-from rain)
'Rain is progressing from the point which my father drove the car up to.'

What is relevant in this sentence is the position, in surface structure, of the spatial enclitic /-jį'/ 'up to a point'. Notice that it appears as a suffix to the verb of the embedded clause--i.e., it is suffixed to the verb /niiníɁbą́ąz/ 'he drove it to a terminal point'. However, that enclitic normally appears on complements of such terminative verb forms, and verbal complements normally precede the verbs which govern them--as in (52) below:

(52) Shizhé'é chidí aa-jį' niiníɁbą́ąz.
(my:father car there-upto drove)
'My father drove the car up to that point.'

This fact, together with the surface fact of sentence (51), suggests strongly that there exists a rule which moves an enclitic complement out of an embedded clause, to the right, attaching it to a complementizer /-í-/ appearing at the end of

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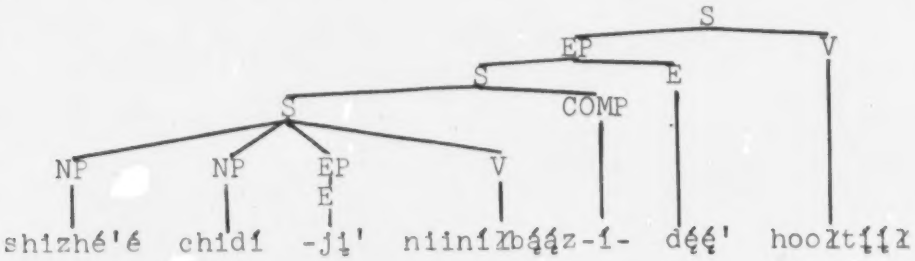
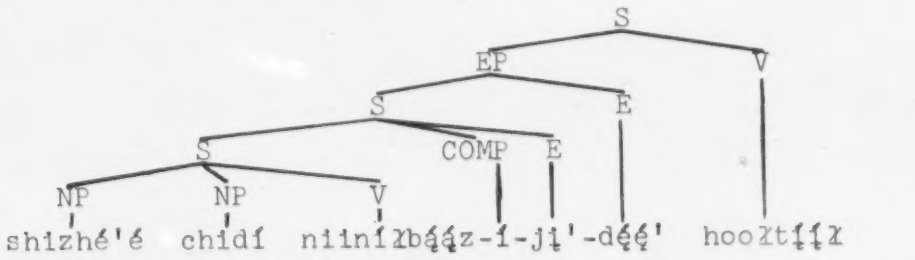
the embedded clause. If this is correct, then the underlying structure of sentence (51) is something like (53):

(53)



(In which EP stands for 'enclitic phrase' and E stands for 'enclitic'). The raising rule removes the enclitic /-jį'/ from its normal position within the embedded clause and places it after the complementizer which follows that clause, thereby giving the derived structure (54):

(54)



The raising operation, so to speak, lifts the enclitic out of the embedded clause and into the main clause. It is clear that the enclitic 'up to a point' is selected by the embedded verb, not by the main verb -- the latter selects its own enclitic /dę́ę́'/ 'from'. Notice that the final positioning of the formerly embedded enclitic is essentially the same as that of the head of a relative clause --namely, in the position immediately following the embedding.

We have here what seems to be incontrovertable evidence for a movement rule whose effect is basically that of the raising rule (12) proposed for relativization. It is not inconceivable that enclitic raising is, in fact, to be identified as a special case of relativization. If this is so, then relativization must itself be a raising rule.

There is one possible argument against this suggestion, but

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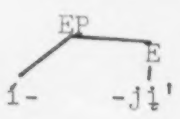
further study will, we believe, prove the objection to be invalid. Kaufman assumed that enclitic raising is an obligatory rule. On the other hand, if relativization is accomplished by raising, then it must be optional in order to account for sentences like (1) -- with raising. If, however, enclitic raising were also optional, then this disparity would vanish. In this connection, consider sentence (55), which is synonymous with (51):

(55) Shizhé'é chidí niiníɁbą́ą́z-dę́ę́' hooʔtɬɬʔ.

Notice that the enclitic /-jɬ'/ is entirely absent from the surface string here. We would like to suggest that this version is derived from precisely the same source as (51) by simply taking the option of not applying the raising rule -- this is, at least, a natural way to account for the synonymy. We must, of course, also suggest that the enclitic deletes from the embedded clause -- but this seems a reasonable move, since otherwise the enclitic would be left dangling, unattached to any phonologically constituted constituent in that clause.

If enclitic raising and relativization are both optional, then their properties are virtually identical; and there is little reason not to regard them as being the same process. But there are details inhering in sentence (55) which suggest an even stronger argument in favor of the raising hypothesis for relativization. Observe that sentence (55) not only lacks an appearance of the enclitic /-jɬ'/, it also lacks a complementizer on the verb of the embedded clause. This suggests that the element which we have referred to as the complementizer (COMP) in fact emanates from the embedded clause and is, itself, positioned in surface structure through the agency of the raising rule. This would require us to amend our conception of the deep structure (53) and to regard the element /-ɪ-/ as a constituent of the embedded enclitic phrase (EP) -- as in (56):

(56)



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when raising applies, it is the entire EP which raises. If raising does not apply, then the EP simply deletes. It is possible that the element /-í-/ is a determiner or a pronoun of some kind -- perhaps it is to be identified with the phonologically identical element /-í/ appearing in the pronominal forms /shí/ 'I', /bí/ 'he, she, it', /nihí/ 'we, you nonsingular', and [hó] (< /hwí/) 'one' (and whose failure to appear in /ní/ 'you singular' is a separate problem). If it is in fact a pronoun, then its disappearance from (55) is simply a special case of a rule needed elsewhere in Navajo to delete independent pronouns.

Now observe that in relative clauses involving full noun phrases, a complementizer -- heretofore referred to as the 'relativizer' (REL, /-yęę/ or /-ígíí/, depending on tense) -- appears on the embedded clause whether or not the noun phrase itself is in the raised position. We would like to suggest that this is in fact a determiner emanating from the embedded noun phrase and that there are two versions of raising -- one in which only the determiner raises and another in which both the noun phrase and the determiner raise. The former version, we propose, is blocked in the case of enclitic raising -- since the enclitic is a suffix to the embedded dterminer, the determiner cannot raise alone, unaccompanied by the enclitic; therefore, in the case of enclitic phrases, the only raising allowed is that in which both elements are moved.

If the complementizers, or relativizers, /-yęę/ and /-ígíí/, which appear in noun phrase relative clauses are in fact determiners, then it should be possible for them to appear on simple noun phrases, and in simple sentences. The fact that this is indeed the case enhances our argument. Consider the following sentences:

(57) (i) Łįį'-ęę dilwo'.
'The afforementioned horse is fast.'

(ii) Łįį'-ígíí dilwo'.
'The (one which is a) horse is fast.'

Although there remain a number of details which must be worked out -- in particular, the exact formulation of the raising rule; the question as to whether it is a copying rule or not, and the like -- we feel that enough evidence is in for us to conclude that the struggle between the two competing conceptions of Navajo relativization is won decisively by the raising hypothesis.

t'áá ákódí

References

Creamer, Mary Helen (1974) "Ranking in Navajo Nouns", Diné Bizaad Náníl'įįh / Navajo Language Review 1, 29-28.

Hale, Kenneth (1973) "A Note on Subject-object Inversion in Navajo", in Kachru, Braj B., et al. eds. Issues in Linguistics: Papers in Honor of Henry and Renée Kahane. University of Illinois Press.

Kaufman, Ellen (1972) Navajo Spatial Enclitics: A Case for Unbounded Rightward Movement, unpublished paper, MIT.

Platero, Paul R. (1973) A Study of the Navajo Relative Clause, Master's Thesis, MIT.

ADDENDUM

This paper was also read at the Winter Meetings of the Linguistic Society of America, in San Diego, 1973. We are grateful to Suzette Elgin for presenting the paper for us at those meetings.

RANKING IN NAVAJO NOUNS[1]

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The topic of this paper is the Navajo rule of subject-object inversion,[2] the syntactic effect of which is closely similar to that of the passive in English. I have reviewed my knowledge of the Navajo language as a native speaker to determine the conditions under which subject-object inversion occurs, cross-checking my findings with other native speakers. I have restricted this review to those occurrences found in sentences with transitive action verbs. That is, in Navajo, "yi-" and "bi-" verbs.

The inversion occurs between the deep structure and surface structure of these sentences. Unlike English, in which such inversions (i.e., the passive) occur under conditions having to do with the semantic content and syntactic properties of the verb, the inversion in Navajo is governed by reference to a system of classification of nouns into status groups, or ranks, within a Navajo world view. Within this system, the nature of the verb plays a secondary role.

In a Navajo world view, the various beings or objects in the world each have certain inherent qualities or characteristics. These qualities are inferred from experience in terms of what you would ordinarily expect these beings to do, or how

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you would expect them to interact with each other. These qualities tend to lend status to some nouns and not to others. Qualities which tend to give higher status are: 1. capacity for having intent or purpose; 2. intelligence; 3. strength, vigor, aggressiveness, or special potency; 4. usefulness to man, or relatedness to man; and 5. animation, or capacity for movement. This world view is built upon common sense inferences from ordinary experience, and involves few abstractions, or abstract explanations of phenomena.

Consistent with this world view, the characteristics of each being identified by a noun in Navajo appear to be summed up in an inherent "capacity to act upon" in relation to other beings. The noun is assigned to a group of nouns which have the same degree of freedom to interact with others. Each such group is ranked above all other groups upon which its members can act freely, but which cannot freely act upon them. Each group is ranked below all other groups whose members can act freely upon it, or upon whose members it cannot freely act. Exceptions to these rankings appear to be related to the same common sense ideas of "who can be expected to be able to act upon whom".

The actual rankings which I am reporting here, however, have not been derived from this common sense rationale, but from the review of a large number of typical Navajo sentences as ordinarily framed by myself and other native speakers from our experience of customary usage. The rationale was derived by inference out of usage, rather than the other way around. I must confess that after I had repeatedly constructed and compared both preferred and non-preferred structures, I, myself, would become confused as to what was proper usage and what was not. I would then have to refer to someone else whose mind was not filled with so many other ways of saying something, and so many possible reasons for doing so.

The general rules for subject-object inversion in Navajo seems to be as follows:

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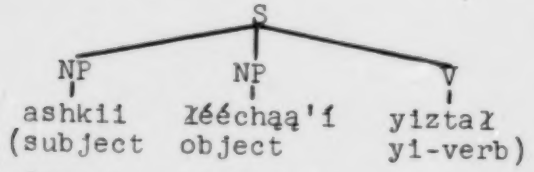
(1) The first noun phrase in the deep structure is the subject of the sentence.

(2) The second noun phrase in the deep structure is the object of the sentence.

If there is a difference in status between the nouns related by the action of the verb, the higher status noun is the preferred surface-structure subject, or topic, regardless of the deep structure of the sentence. If the deep structure identifies the higher status noun to be the actor of the verb, the active (yi-) form is used.

Active form (yi-)

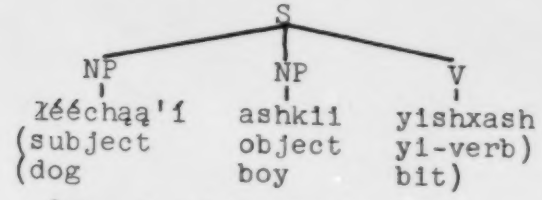


'The boy kicked the dog.'

However, if the deep structure identifies the higher status noun to be the receiver of the action of the verb, the passive (bi-) form is used.

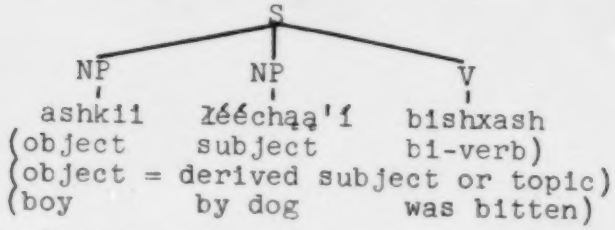
Passive form (bi-)

i) deep structure



'The dog bit the boy.'

ii) surface structure



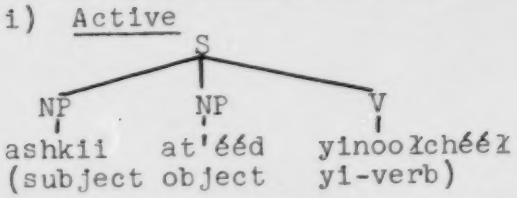
'The boy was bitten by the dog.'

The effect of these constraints is to ensure that the higher ranking noun phrase appears in the initial position in the sentence. Or to put it another way, in cases of unequal rank, the topic of the sentence must be the higher ranking noun phrase.

If there is no difference in status between the nouns related by the action of the verb, either noun may be chosen to be the derived, or surface subject of the sentence. The subject chosen by the speaker is the object of major interest or emphasis. If the speaker chooses the actor of the verb to be the surface subject of the sentence, the active verb form (yi-) is used. But if the speaker chooses the goal of the verb to be the surface subject of the sentence, the passive verb form (bi-) is used.

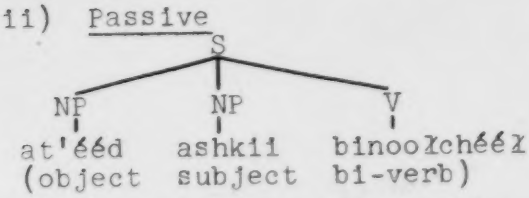
Optional forms for equal status nouns

i) Active



'The boy is chasing the girl.'

ii) Passive



'The girl is being chased by the boy.'

The semantic effect of subject-object inversion in this case appears to be quite similar to that of the passive in English.

With few exceptions, the status of nouns may be found by classifying them according to the following groupings, listed in rank order from highest to lowest. Nouns within each of the groupings are treated as of equal status in subject-object inversion constructions, and those in each group are treated as of higher status than those of all groups listed below it, and lower status than those of all groups listed above it.

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Rank or status groupings

Group 1. Nouns denoting persons. All human beings are treated, for the purposes of subject-object inversion, as of equal status, regardless of whether grouped, or individual, or of ethnic, sex, rank, or age differences. Two exceptions to the top-ranking status of this category are noted: first, lightning when used with a verb denoting its characteristically potent striking force is treated as of equal status with persons; second, newborn infants are of lower status than other humans. When interacting with the larger animals they are treated as of equal status with those animals. This remains true, however, only as long as the infant retains the helplessness characteristic of the newborn. As soon as he becomes capable of intent and movement, he is treated as fully human. Examples follow:

Diné ashkii yiztaɬ.	'The man kicked the boy.'
Ashkii diné biztaɬ.	'The boy was kicked by the man.'
Ashkii diné yiztaɬ.	'The boy kicked the man.'
Diné ashkii biztaɬ.	'The man was kicked by the boy.'
Ashkii at'ééké yinooɬchéézɬ.	'The boy is chasing the girls.'
At'ééké ashkii binooɬchéézɬ.	'The girls are being chased by the boy.'
At'ééké ashkii yinooɬchéézɬ.	'The girls are chasing the boy.'
Ashkii at'ééké binooɬchéézɬ.	'The boy is being chased by the girls.'
Naat'áanii doonáldzidí bilagáana yiyiisxɬ.	'The fearless leader killed the white man.'
Bilagáana naat'áanii doonáldzidí biisxɬ.	'The white man was killed by the fearless leader.'
Bilagáana naat'áanii doonáldzidí yiyiisxɬ.	'The white man killed the fearless leader.'
Naat'áanii doonáldzidí bilagáana biisxɬ.	'The fearless leader was killed by the white man.'
Ii'ni' diné yiɬ ɬee' díízch'il.	'Lightning struck the man.'
Diné ii'ni' biɬ ɬee' díízch'il.	'The man was struck by lightning.'

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However, in the following cases, one structure (indicated *) is not preferred, because of the lower status of the infant.

*Awéé'chí'í diné yiztaƛ.	'The baby kicked the man.'
Diné awéé'chí'í biztaƛ.	'The man was kicked by the baby.'
Diné awéé'chí'í yiyiisxɬ.	'The man killed the baby.'
*Awéé'chí'í diné biisxɬ.	'The baby was killed by the man.'

And in the following cases, involving animals of lower status than man, because of the lower status of the infant human either structure is acceptable.

Chɬɬh yee'idilohii awéé'chí'í yishjizh.	'The elephant crushed the baby.'
Awéé'chí'í chɬɬh yee'idilohii bishjizh.	'The baby was crushed by the elephant.'

Group 2. Nouns denoting the larger animals and medium sized animals of special intelligence or relationship to man (such as the dog) and predators. This category includes the horse, donkey, mule, bull, cow, elephant, lion, bear, wolf, and wildcat. These are considered equals, not just because of size, but because of inherent capacity to act independently toward each other. For example:

Dóola shash yizgoh.	'The bull gored the bear.'
Shash dóola bizgoh.	'The bear was gored by the bull.'
Ƛéechąą'í dzaanéézyishxash.	'The dog bit the mule.'
Dzaanéézƛéechąą'í bishxash.	'The mule was bitten by the dog.'

However, in the following cases, one structure is not preferred because it violates the principle of ranking, whereby humans are higher than animals.

*Dóola diné yizgoh.	'The bull gored the man.'
Diné dóola bizgoh.	'The man was gored by the bull.'

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*Łéęchąą'í ashkii yishxash.	'The dog bit the boy.'
Ashkii łéęchąą'í bishxash.	'The boy was bitten by the dog.'

And, in the following cases, involving interaction with nouns in lower groupings, one structure is not preferred.

Shash dibé yiyiisxį.	'The bear killed the sheep.'
*Dibé shash biisxį.	'The sheep was killed by the bear.'
*Dibé awéé'chí'í yiztał.	'The sheep kicked the baby.
Awéé'chí'í dibé biztał.	'The baby was kicked by the sheep.'

Group 3. Nouns denoting the medium sized animals. This category includes sheep and goats, turkeys, eagles, hawks, cats, chickens, deer, antelope, foxes, and coyotes. The following are acceptable:

Mósí tązhii yinoołchéél.	'The cat is chasing the turkey.'
Tązhii mósí binoołchéél.	'The turkey is being chased by the cat.'

But in the following case, involving interaction with a lower grouping, one structure is not preferred.

Mósí na'azísí yinoołchéél.	'The cat is chasing the gopher.'
*Na'azísí mósí binoołchéél.	'The gopher is being chased by the cat.'

Group 4. Nouns denoting the small animals, including the squirrel, gopher, chipmunk, mice, rabbits, songbirds, snakes, frogs, toads, and turtles. In the following, inversion is acceptable:

Tl'iish ánínígíí naasts'ǫǫsí yiyiisxį.	'The rattlesnake killed the mouse.'
Na'asts'ǫǫsí tl'iish ánínígíí biisxį.	'The mouse was killed by the rattlesnake.'

But in the following case, involving interaction with a lower grouping, one structure is not preferred.

*Tsís'ná na'asts'ǫǫsí yishish.	'The bee stung the mouse.'
Na'asts'ǫǫsí tsís'ná bishish.	'The mouse was stung by the bee.'

Group 5. Nouns denoting the insects, spiders, worms, centepedes, and scorpions. Tne following are both acceptable forms:

Tsís'ná na'ashjé'ii yishish.	'The bee stung the spider.'
Na'ashjé'ii tsís'ná bishish.	'The spider was stung by the bee.'

But in the following case, involving interaction with a lower grouping, one structure is not preferred.

*Tó wóláchíí' yiyiisxɬ.	'The flood killed the ant.'
Wóláchíí' tó biisxɬ.	'The ant was killed by the flood.'

Group 6. Nouns denoting natural forces such as windstorms, flood, sunshine (heat), and forest or range fire. In the following case, involving interaction with a lower grouping, one structure is not preferred.

Tó dá'deestl'in yinahjɬ' nínígo'.	'The flood came to rest against the dam.'
*Dá'deestl'in tó binahjɬ' nínígo'.	'The dam stopped up the flood (lit.: The dam had the flood come and lean on it.)'

Group 7. Nouns denoting plants and inanimate objects. A special rule governs the interactions of the nouns within this classification when verbs with yi- and bi- forms are used. In each case, the semantic content of the verb implies movement on the part of one of the nouns in the sentence, and this noun then takes higher status than the more stationary object. In the following cases the noun denoting the entity which moves has higher status. Thus one structure is preferred over the other.

Tsé t'iis yik'i ch'ínímááz.	'The rock rolled upon the tree.'

*T'iis tsé bik'i ch'ínímááz.	'The tree was rolled upon by the rock.'
T'iis tsé yik'iikéézz.	'The tree fell upon the rock.'
*Tsé t'iis bik'iikéézz.	'The rock was fallen upon by the tree.'

And in the following case, involving interaction with the lowest grouping, one structure is preferred.

*Są́ t'iis yiyiisxɬ.	'Old age killed the tree.'
T'iis są́ biisxɬ.	'The tree died of old age.'

Group 8. Nouns denoting abstractions such as old age, hunger, disease (or its symptoms), "germs", emotions, or other things of which no action is seen other than effects. You may find it of some comfort to know that in Navajo old age cannot kill you. You may only die of it.

Each of the examples cited relates nouns which are either in the same grouping, or in the next grouping above or below. The pattern of relationship between nouns in groupings more widely separated in classification is consistent with the the examples shown. That is, group 1 nouns are of higher status than all other groups, and group 2 nouns of higher status than all other groups except group 1 and so on. There is one exception to this rule. Group 7 nouns, and some group 2 and 3 nouns are occasionally "personified" in legendary writing or story telling. In this case the personified noun is treated as of equal status with whatever category of nouns it is interacting with in the sentence. That is to say, either yi- or bi- form verbs may be used. And either noun may be the subject or topic, at the story teller's option.

Notes

1. This paper was read at the Xth Conference on American Indian languages held in conjunction with the Annual Meetings of the American Anthropology Association, 1971, New York.

2. This rule has also been discussed in Kenneth Hale "A Note on Subject-object Inversion in Navajo" in Kachru, Braj B., et al. eds. Issues in Linguistics: Papers in Honor of Henry and Renée Kahane, University of Illinois Press.

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DINÉ BIZAAD DADIITS'A'ÍGÍÍ NAASKÁÁ'

LIBBY JAYNE BECENTI AND DELPHINE CHEE

LUKACHUKAI SCHOOL

I. Áłtsé ha'oodzí'ígíí. Díí naaltsoos ályaaígíí éí saad diits'a' naalkaah ha'nínígíí yaa halne'. Diné Naabeehó danilínígíí lą'ígóó bá da'ólta'. Áko áłchíní nanitinígíí t'óóyó nanitl'a nahalin háálá saad diits'a' baa hodoonihęę saad binahjį' dooígíí t'áá nihee ádin. Éí bąą kwii lą'ígo saad t'óó baantséhéskézígo íilyaa.

Ayóo nanitl'a díí saad naalkaah bił haz'ąníjí; ákondi díí naaltsoos bii' hane' ályaaígíí doo hózhǫ́ yéego nanitl'agóó ályaa. Ákót'éego ályaaígíí éí biniyéii hóló. Éí éí T'áá Diné bá'ólta'í danilínígíí saad diits'a' naalkaah doo yaa da'ííłta' da. Díí naaltsoos yínítta'go saad ániid ánáá daalyaaígíí hazhó'ó baa hane'go ałkéé' sinil.

Áłtsé baa náhódóot'įįłígíí éí yízhí t'óó ádaalne'doo áádóó ákóne' éí yízhí ádaalyaaígíí hait'éego choo'įníígíí ííshjąą ádoolníłł.

Díí yízhí chodaoz'įįdígíí éí Massachusetts Institute of Technologydi ádaalyaa ńt'ęę'. Áko díí Mary Helen Creamer dóó Ellavina Tsosie dóó Paul Platero dóó Kenneth Hale éí áájí yaa ndaashnishgo t'óó bits'ąądóó díí naaltsoos íilyaa. Ahéhee' bidii'ní áko.

II. Za'áán baa hane'ii. Díí éí kwe'é bilagáana vowel deiłníníígíí éí za'áán wolyéego éí díí dįį'go dahshijaa'go bits'ąądęę' saad dadiits'a'ígíí éí a, e, i, o.

> a éí zoołii doo ałch'i' ánát'įįhgóó éí hatsóghąą' bił haz'ąągi diits'a'go éí tsóyah wolyé, háálą hatsoo' yaa át'é nahalin biniinaa. Áádóó hatsoo' t'ąą' át'é, áko tsót'ąą' ałdó' wolyé. Díí kwe'é

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naashch'ąą'ígíí yik'i sinil:

	tsónáás	tsót'ąą'
tsódah	i	o
tsóyah	e	a

e ájíníigo éí zoołii ąą' át'éego hatsoo'ígíí ałdó' tsóyah át'é. Hatsoo' náás át'éego biniinaa tsónáás wolyé.

i díí za'áán éí tsónáás dóó tsódah.

o díí éí hatsoo' t'ąą' át'é dóó hódah, ako tsót'ąą' dóó tsódah.

Za'áán hazéé' góne' dadiits'a'go bił dahnahaz'ánígíí éí kót'é:

III. Zatl'ah baa hane'ii. Díí consonants wolyéhígíí éí saad bee dadiits'a'go éí dinéjígo zatl'ah dabidii'ní. Éí hazéé'dęę' níłch'i háách'iígíí niitl'ahgo ółolyé. Nááná łahgo át'éego baa nááháne'go éí hayi'dęę' hááyolígíí hazéé' góne' ha'át'íísh¡į binііłtl'ahgo áhdii'ní. Hazéé' góne' aniiłtl'ahígíí éí díí hawoo' dóó hatsoo' lá. Saad tádiin dóó bi'aan ał'ąą át'éego dadiits'a'. Kwe'é ła' saad ałkéé' nii'nil t'óó binahj¡' ééhózin biniiyé.

chizh	hwee	bilid	shash	yízhí
dlǫǫ'	waa'	zhóní	tin	yaa
dził	jí	ma'ii	tsin	zéí
gah	kǫ'	sis	tlah	nabégilí

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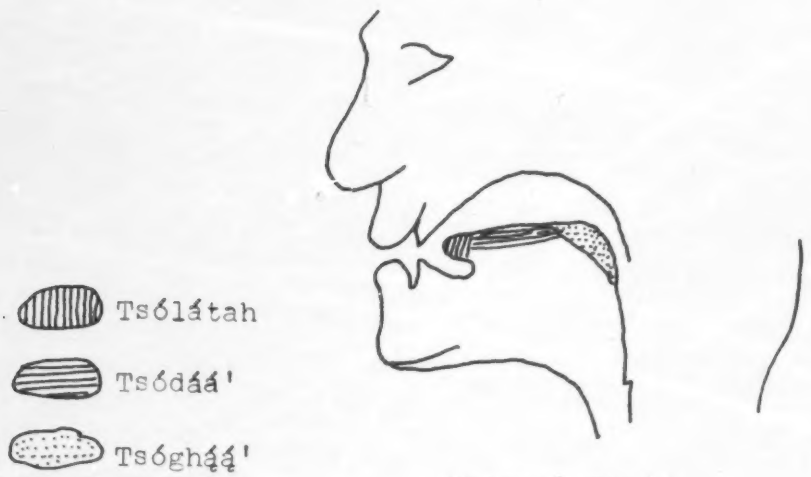
A. Hatsoo' siláii baa hane'ii

Díí kwii hatsoo' siláhígíí éí táá'go dabízhi' dahólónígíí baa nááhodoonih. Éí díí na'ashch'ąą'ígíí bikáá' yízhí ła' sinil:



Hatsoo' Siláii

Tsólátah - Díí éí tsólátah dabidii'nínígíí éí bilagáanají apex deiłníigo hatsoo' bílátahígíí ólyé.

Tsódáá' - Díí éí bilagáana laminal deiłníigo hatsoo' dah niteelígi bił haz'ánígíí dayózhí.

Tsóghąą' - Díí éí dorsum wolyéhígíí ólyé.

B. Saad bee diits'a'

Saad bee diits'a' ha'nínígíí éí position of articulation ólyé. Saad bee diits'a'ígíí díí hatsoo' dóó hazéé' ałą́ą ánáát'įįłgo bee yájíłti'ígíí diits'a'go, dóó hatsoo' naha'náago dóó díí hajéí yilzhólí bii'dęę' hayol bee yájíłti'. Éí díí áłká anájah nahalingo áko díí ńléí saadígíí diits'a'.

Saad bee diits'a' dii'nínígíí éí dįį'go ałą́ą át'éego bee yádeiilti' lá. Díí alą́ąjį'ígíí éí hadaa' bee yáti', áko díí daa'ii wolyé. Ńléí hadaa' ałch'į' át'įįhgo bee saad diits'a', éí díí /b/ deiłní. Béésh dóó bis dóó bááh jiniihgo éí díí bee bééhózin. Díí éí na'ashch'aa'ígíí yaa halne:

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Daa'ii

Díí daa'ii dabidii'ní. Bee wójíhígíí éí hadaa' t'áá áłah ałch'ą' át'éego bee saad ájiiłˀą́hígíí. Kót'éego éí /b/ dóó /m/ bee ájíní.

Nááná díí ła' éí tsólátah-wónáá'ii wolyé. Éí díí hatsoo' bílátahgi hawónáá'ii béédíjiłgo bee yáti'. Éí /d/ deiłníníígíí bee bééhózin. Dééh, díí, dóó daan dajózhíigo bee bééhózin.

Tsólátah -wónáá'ii

Díí tsólátah -wónáá'ii bee wójí. Éí díí wónáá'ii wódahdęę'ígíí hatsoo' bílátahgi bídíjiłgo bee /d/, /t/, /t'/, /s/, etc. ájíní.

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Ła' éí tsódáá' - wónáá'ii wolyé. Éí díí hatsoo' bidá'ígi hawónáá' béédíjiłgo bee yáti'. Éí díí jish, jádí, jooł jiníigo éí díí /j/-ígíí bee dadiits'a'. Éí díí na'ashch'ąą'ígíí yaa halne'.

Tsódáá' -wónáá'ii

Tsódáá' - wónáá'ii deiłnínígíí éí tsódáá' wónáá'ii bidii'áago wójí. Éí díí hatsoo' bidáá'ígíí wónáá'ii wódahdęę'ígíí béédiijiłgo /j/, /ch/, /ch'/, /sh/, /zh/ ájíní.

Nááná díí akéédęę'ígíí éí tsóghąą' - azahat'áahii wolye. Éí díí hatsoo' bighąą'ígíí azahat'áahii béédiijiłgo ółyé. Éí bee dadiits'a'ígíí éí /g/; gah, gish, ge', jiníigo bee béehózin.

Tsóghąą' - azahat'áahii

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Tsóghą́ą́' - azahat'áahii deiłníníigíí éí tsóghą́ą́' - azahat'áahii Díí hatsoo' bighą́ą'gi hazahat'áahii béédiijiłgo /g/, /k/, /k'/, /x/, /h/, dóó /gh/ bee ájíní.

Díí éí áłtsé bitaa'íníiji'ígíí hoł bééhózingo éí Diné bizaad doo nanitl'agóó bee bóhojooł'ááh.

C. Bił dahnahaz'ą́ągo saad bee dadiits'a' bína'ídíkid

A. Díí kwe'é dį́į'go ał'ąą át'éego saad dadiits'a'ígíí ałhą́ąh nidadii'nił dóó índa dadiits'a'ágóó baa hodiilnih. Díí bee hadahwiis'áhígíí ałhą́ąh nidaas'nilgo éí dį́į'go dahnaazhjaa'go ádadoolniił. Bee hadahwiis'áhígíí éí /b/, /d/, /j/, /g/

1. Áłtsé ndadoo'nił, éí dadiits'a'ígíí bik'ehgo.
2. Kwe'é saad t'óó bee hadahwiis'áhígíí ałkéé' ndadii'nił.
3. Áádóó kóne'é éí ałtaanásdziid dooleeł.

dééh	gah	jooł	béésh
bis	jish	bááh	jádí
gish	dóó	daah	ge'

4. K'ad éí díí saad sinilígíí bee ádadohní. (hadaa' dóó hatsoo' ał'ąą ánáát'į́łgo bee áhá'ní).

B. Bił dahnahaz'ą́ągo saad bee dadiits'a'ígíí ch'ínáánát'ą́.

1. Daa'ii - jó hadaa' t'áá áłah ałch'į' ájiił'į́łhgo saad jidiiłts'į́łhgo óolyé dii'niid.
2. Tsólátah - wónít'ii - éí hatsoo' bílátahgi hawoo' bikétsį́įdi béédiijiłgo óolyé.
3. Tsódáá' - wónít'ii - Tsódáá' - wónít'ii jiniihgo éí hatsoo' bidáá'ígíí hawoo' bikétsį́įdi béédiijiłgo óolyé.
4. Tsóghą́ą́' - azahat'áahii - Díí éí hatsoo' bighą́ą́'ígíí hazahat'áahii béédíjiłgo óolyé.

Díí dį́į'go áłtsé ndaas'nilígíí bik'ehgo saad ła' ałkéé' ndadoo'nił k'ad.

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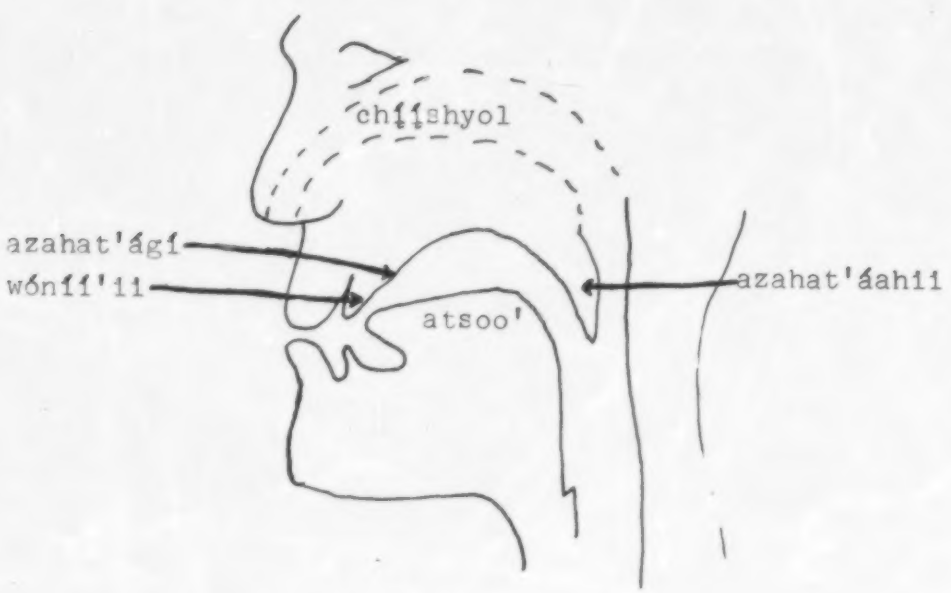
Daa'ii	Tsólátah - wónii'ii
bis	dééh
mósí	Naabeehó
bááh	tó
ma'ii	t'iis
magí	sis

Tsódáá' - wónii'ii	Tsóghą́ą' - azahat'áahii
jish	gah
chidí	kin
ch'ah	hawos
shádí	hosh
zhah	aghaa'

Biłdahnahaz'ąągo saad bee dadiits'a'ígíí lá hait'éego bee óhoo'aah ?

1. Áłtsé saad ájíniih áádóó haash yit'éego éí saad diits'a' hazéé'dęę'.
2. Dį́igo biłdahnahaz'ąnígíí saad bee dadiits'a'ígíí biyaa da'dízóóh. (daa'ii, tsólátah-wónii'ii, tsódáá'-wónii'ii, tsóghą́ą'-azahat'áahii).

Biłdahnahaz'ąągo saad bee dadiits'a'go naashch'ąą'go dadínii1'į́łł. Saad dadiits'a'ígíí kwe'é nabiłdnánígíí éí dabízhi' bits'ą́ądęę' saad dadiits'a'ígíí da'asdzoh.



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D. Yol háátsxaaz

Yol háátsxaaz éí manners of articulation ółyé. Doo éí saad biłʔ danahaz'ą́ągóó bee dadiits'a'ígíí t'éiyá da. Díí hayol háátsxaazgo hazéé'góne' ha'át'íshɬɬ biniiłʔtl'ahgo naalkaah éí ółyé yol háátsxaaz. Éí manner of articulation deiʔní bilagáana. Díí hazéé'góne' adínółʔtl'ahígíí éí hawoo' lá, hatsoo' lá dóó hadaa' lá. Éí díí saad bee ájíniihgo hazéé'dęę́' daats'i hayol háátsxaaz éí doodago daats'í háchɬɬshtahdęę́' hayolígíí háátsaaz ʔeh? Éí díí ninádadiilkah.

/m/ jiniihgo hayolígíí doo hazéé'dęę́' háátsxaaz da. Díí /m/ jiniihgo hayolígíí háchɬɬshtahdęę́' hááyolęę éí díí chɬɬshyol wolyé. /m/ biłʔ dahnahaz'ą́ągo saad bee dadiits'a'ígíí éí daa'ii daolyé. /n/ chɬɬshyol át'éendi doo daa'ii át'éeda.

Daa'ii-chɬɬshyol

/m/ jiniihgo éí háchɬshtahdęę́' hayol háátsxaaz ʔeh. Díí na'ashch'ąą' yaa halne'ígíí éí chɬɬshyol wolyé.

/b/ jiniihgo éí hayolígíí doo hazéé'dęę́' háátsxaaz da dóó doo háchɬɬshtahdęę́' da, éí díí hayolígíí kót'ɬɬhgo yolkaʔ wolyé.

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Daa'ii-yolkaɮ

/b/ jiniihgo éí hayolígíí azahat'áahii dá'díɮkaɮgo (hayolígíí t'óó bidá'dílkaɮgo) t'óó niiltlí'. Zatl'ah kót'éhígíí yolkaɮ wolyé. Éí díí na'ashch'ąą'ígíí yaa halne'. Éí díí hayolígíí t'óó k'ékaɮgo díí /b/ t'óó daa'ii ha'níígíí biyaagi yisdzoh. K'ad éí díí saad bee dadiits'a'ígíí dóó yol háátsxaazígíí aɮkéé' ndadoo'niɮ.

saad bee dadiits'a' dóó yol háátsxaaz

	Daa'ii	Tsólátah-wónáá'ii	Tsódáá'-wónáá'ii	Tsóghąą'-azahat'áahii
Yolkaɮ	b	d t t'	j ch ch'	g k k'
Chą́shyol	m	n		

Yol háátsxaaz biɮ dahnahaz'ánígíí ɮa' yoldǫǫh wolyé. ɮa' éí doo yoldǫǫh da. Díí yoldǫǫh éí díí hayolígíí díildǫǫh nahalingo óolyé. T'áá ńléí hajéí yilzhólí biyi'dęę' hayol tsxą́ɮgo háátsxaazgo óolyé. Doo yoldǫǫh daígíí éí hayol doo díildǫǫhgó óolyé.

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yoldǫǫh dóó doo yoldǫǫh da

Yolkaɬ	Daa'íí	Tsólátah-wónítʼíí	Tsódáá'-wónítʼíí	Tsóghą́ą́'-azahatʼáahíí
doo yoldǫǫh da	b	d	j	g
yoldǫǫh	-	t	ch	k

Yolchʼiɬ éí /tʼ/, /chʼ/, dóó /kʼ/ bee dadiitsʼa'. Éí díí hayolígíí hazooɬii déíʼdiɬkaɬgo óolyé. Éí /ʼ/ bee bééhózin aɬdóʼ.

yolchʼiɬ

Yolkaɬ	Daa'íí	Tsólátah-wónítʼíí	Tsódáá'-wónítʼíí	Tsóghą́ą́'-azahatʼáahíí
doo yoldǫǫh da	b	d	j	g
yoldǫǫh	-	t	ch	k
yolchʼiɬ	-	tʼ	chʼ	kʼ

Ánídí yol háátsxaaz baa dahóóneʼígíí éí kʼad kǫǫ́ aɬkéé' sinil. Yol háátsxaaz biɬ dahnahazʼánígíí ɬaʼ yoltlʼah wolyé. Éí díí hayolígíí hatsooʼ bikáá'góó háátsxaazgo. /z/, /zh/, /gh/-go dadiitsʼaʼígíí éí yoltlʼah daolyé. Zatlʼah ɬaʼ yoltlʼah daolyéhígíí zǫǫz nahalingo dadiitsʼaʼígíí éí bízhiʼ yolzǫǫz. Áádóó doo yolzǫǫz da. Díí yolzǫǫz éí zooɬii ditsxizgo diitsʼago óolyé. Dadiitsʼaʼígíí éí /z/, /zh/, /gh/, éí díí bee bééhózin. Doo yolzǫǫz da wolyéhígíí éí díí hayolígíí tʼóó háátsxaaz dóó zooɬii doo diitsʼa' da. /s/, /sh/, /x,h/ jiniihgo bee bééhózin.

yolzǫǫz dóó doo yolzǫǫz da

Yoltlʼah	Daa'íí	Tsólátah-wónítʼíí	Tsódáá'-wónítʼíí	Tsóghą́ą́'-azahatʼáahíí
yolzǫǫz	-	z	zh	gh
doo yolzǫǫz da	-	s	sh	x, h

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Tsólátah-wónÍÍ'ii éí naakigo aɮts'ą́dzo. Zatl'ah /d/ dóó /dl/ diits'a'go hayol ha'iijooɮígíí éí bee bééhózin. Jó ɮa' níɮch'i hatsoo'ígíí bááɮk'iisjí (aɮts'ą́ą́hjí) háátsxaaz. ɮa' éí hatsoo' bikáá'dęę́' (aɮnÍÍ'dęę́') háách'i. Éí bąą aɮts'ą́ą́yol dóó aɮniiyol dii'ní. Díí aɮts'ą́ą́yolígíí éí hatsoo' siláhígíí bááɮk'iisjí hayolígíí aɮts'ą́ą́dęę́' háátsxaazgo ółyé. ɮą́ą́' dii'niihgo nihitsoo' aɮts'ą́ą́'jígo niɮch'i diits'a'. Laanaa jiniihgo aɮdó' t'áá ákót'é. Náána díí aɮníÍyol wolyéhígíí éí hatsoo' aɮnÍÍ'dęę́' hayol háátsxaazgo ółyé. Sis jiniihgo ákót'é.

Áko tsólátah-wónÍÍ'ii ádaat'éii éí kót'égo aɮts'ą́'nil:

aɮníÍyol	aɮts'ą́ą́yol
d	dl
t	tl
t'	tl'
ts	l
z	ɮ
n	

saad bee dadiits'a' dóó yol háátsxaaz

		Daa'ii	Tsólátah-wónÍÍ'ii aɮnÍÍ-yol	Tsólátah-wónÍÍ'ii aɮts'ą́ą́-yol	Tsódáá'-wónÍÍ'ii	Tsóghą́ą́'-azahat'áahii
Yolkaɮ	yoldǫǫh	b	d dz	dl	j	g
	doo yoldǫǫh da	-	t ts	tl	ch	k
	yolch'iɮ	-	t' ts'	tl'	ch'	k'
Yoltl'ah	yolzǫ́ǫ́z	-	z	l	zh	gh
	doo yolzǫ́ǫ́z da	-	s	ɮ	sh	x, h
	chą́ąshyol	m	n	-	-	-

E. Dadiits'a' bééhózin Dadiits'a' bééhozin éí features áhdeiiłní. Díí kwe'é éí dadiits'a' bééhózinígíí ałkéé' ninádanii'nííł. /+/ si'ą́ągo éí holǫ́ǫgo át'é, /-/-go éí ádingo. /-daa'ii/ bikáá'go éí daa'ii t'áágéédgo áha'ní, éí doodago éí doo daa'ii da níigo át'é.

/b/

-za'áán
+zatl'ah
+daa'ii
+yolkałł
-yoldǫǫh

/d/

-za'áán
+zatl'ah
+tsólátah-wónáá'ii
+yolkałł
-yoldǫǫh

/j/

-za'áán
+zatl'ah
+tsódáá'-wónáá'ii
+yolkałł
-yoldǫǫh

/g/

-za'áán
+zatl'ah
+tsóghą́ą́'azahat'áahii
+yolkałł
-yoldǫǫh

/t/

-za'áán
+zatl'ah
+tsólátah-wónáá'ii
+yolkałł
+yoldǫǫh

/m/

-za'áán
+zatl'ah
+daa'ii
-yolkałł
-yoltl'ah
+chą́ą́shyol

/z/

-za'áán
+zatl'ah
+tsólátah-wónáá'ii
-yolkałł
+yoltl'ah
+yolzǫ́ǫ́z
+ałníyol

/l/

-za'áán
+zatl'ah
+tsólátah-wónáá'ii
+yoltl'ah
+yolzǫ́ǫ́z
+ałts'ą́ą́yol

/ch'/

-za'áán
+zatl'ah
+tsódáá'-wónáá'ii
+yolkałł
+yolch'iłł

/gh/

-za'áán
+zatl'ah
+tsóghą́ą́'-azahat'áahii
+yolzǫ́ǫ́z

/a/

+za'áán
+tsóyah
+tsót'ą́ą́'

/ą/

+za'áán
+tsodah
-tsót'ą́ą́'
+chą́ą́shyol

References

Hale, Kenneth and Lorraine Honie (1972) An Introduction to the Sound System of Navajo, Part I: Articulatory Phonetics, unpublished paper, MIT.

Platero, Paul, Ken Hale, Mary H. Creamer, and Ellavina Perkins, (1973) Grammatical Terms in Navajo, manuscript, MIT.

Editor's note: The illustrations used in this paper are reproductions from Hale and Honie, An Introduction to the Sound System of Navajo, (1972).

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